

Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-82. Cancelled

83. (Currently amended) A method of lowering cholesterol in a mammal in need thereof, wherein said mammal expresses a functional low density lipoprotein (LDL) receptor, said method comprising intravascularly administering to said mammal a replication-defective adenoviral vector comprising a nucleic acid molecule that encodes a secreted polypeptide having fewer than 299 amino acids residues, said secreted polypeptide consisting of a signal peptide and amino acid residues 1-185 of ~~SEQ ID NO:2~~ SEQ ID NO:1 or amino acid residues 1-185 of ~~SEQ ID NO:2~~ SEQ ID NO:1 and one or more of amino acids 186-259 of ~~SEQ ID NO:2~~ SEQ ID NO:1, wherein said polypeptide, when expressed in said mammal, lowers the total serum cholesterol level without inducing hypertriglyceridemia.

84. (Currently amended) The method of claim 83, wherein said polypeptide has at least 90% sequence identity to amino acid residues 1-202 of ~~SEQ ID NO:2~~ SEQ ID NO:1.

85. (Currently amended) The method of claim 84, wherein said polypeptide has 100% sequence identity to amino acid residues 1-202 of ~~SEQ ID NO:2~~ SEQ ID NO:1.

86. (Currently amended) The method of claim 83, wherein said polypeptide has at least 90% sequence identity to amino acid residues 1-229 of ~~SEQ ID NO:2~~ SEQ ID NO:1.

87. (Currently amended) The method of claim 86, wherein said polypeptide has 100% sequence identity to amino acid residues 1-229 of ~~SEQ ID NO:2~~ SEQ ID NO:1.

88. (Currently amended) The method of claim 83, wherein said polypeptide has at least 90% sequence identity to amino acid residues 1-259 of ~~SEQ ID NO:2~~ SEQ ID NO:1.

89. (Currently amended) The method of claim 88, wherein said polypeptide has 100% sequence identity to amino acid residues 1-259 of ~~SEQ ID NO:2~~ SEQ ID NO:1.

90. (Currently amended) The method of claim 83, wherein said polypeptide has 100% sequence identity to amino acid residues 1-185 of ~~SEQ ID NO:2~~ SEQ ID NO:1.

91. (Previously presented) The method of claim 83, wherein said vector is administered intravenously.

92. (Previously presented) The method of claim 91, wherein said vector is administered in an artery at the site of a lesion.

93. (Previously presented) The method of claim 83, wherein said mammal lacks an endogenous, normally functioning apoE gene.

94. (Previously presented) The method of claim 83, wherein said mammal is at risk for developing atherosclerosis due to accumulation of lipoprotein remnants in the bloodstream.

95. (Previously presented) The method of claim 83, wherein said nucleic acid is administered to or expressed in the liver of said mammal.

96. Cancelled.

97. Cancelled.

98. (Previously presented) The method of claim 83, wherein said nucleic acid encodes amino acids 1-203 of an apoE preprotein of any one of SEQ ID Nos. 14-19.

99. (Previously presented) The method of claim 83, wherein said nucleic acid encodes amino acids 1-220 of an apoE preprotein of any one of SEQ ID Nos. 14-19.

100. (Previously presented) The method of claim 83, wherein said nucleic acid encodes amino acids 1-247 of an apoE preprotein of any one of SEQ ID Nos. 14-19.

101. Cancelled.

102. (Currently amended) A method of lowering cholesterol in a mammal in need thereof according to claim 83, wherein said polypeptide has an amino acid sequence that is at least 90% identical to the amino acid sequence of ~~SEQ ID NO:2~~ SEQ ID NO:1.

103. (Previously presented) A method of lowering cholesterol in a mammal in need thereof according to claim 83, wherein said polypeptide has fewer than 299 amino acids.

104. (Currently amended) A method of lowering cholesterol in a mammal in need thereof according to claim 83, wherein said polypeptide does not include amino acids 186-299 of ~~SEQ ID NO:2~~ SEQ ID NO:1.

105. (Currently amended) A method of lowering cholesterol in a mammal in need thereof according to claim 83, wherein said polypeptide does not include amino acids 230-299 of ~~SEQ ID NO:2~~ SEQ ID NO:1.

106. (Currently amended) A method of lowering cholesterol in a mammal in need thereof according to claim 83, wherein said polypeptide does not include amino acids 260-299 of ~~SEQ ID NO:2~~ SEQ ID NO:1.

107. (Currently amended) A method of lowering cholesterol in a mammal in need thereof, wherein said mammal expresses a functional low density lipoprotein (LDL) receptor, said method comprising intravascularly administering to said mammal a replication-defective adenoviral vector comprising a nucleic acid molecule that encodes a polypeptide comprising amino acid residues 1-185 of ~~SEQ ID NO:2~~ SEQ ID NO:1 and does not include amino acid residues 260-299 of ~~SEQ ID NO:2~~ SEQ ID NO:1, wherein said polypeptide, when expressed in said mammal, lowers the total serum cholesterol level without inducing hypertriglyceridemia.

108. (Previously presented) The method of claim 107, wherein said polypeptide further comprises a signal peptide.

109. (Previously presented) The method of claim 108, wherein said polypeptide comprises the amino acid sequence of SEQ ID NO: 13.

110. (Previously presented) The method of claim 107, wherein said nucleic acid molecule encodes a secreted polypeptide comprising amino acid residues 1-277 of any one of SEQ ID Nos. 14-19.

111. (Previously presented) A method of lowering cholesterol in a mammal in need thereof, wherein said mammal expresses a functional low density lipoprotein (LDL) receptor, said method comprising intravascularly administering to said mammal a replication-defective adenoviral vector comprising a nucleic acid molecule that encodes a polypeptide consisting of amino acid residues 1-185, 1-202, 1-203, 1-229, 1-247 or 1-259 of any one of SEQ ID NOS.: 1-6, wherein said polypeptide, when expressed in said mammal, lowers the total serum cholesterol level without inducing hypertriglyceridemia.

112. (Previously presented) A method of lowering cholesterol in a mammal in need thereof, wherein said mammal expresses a functional low density lipoprotein (LDL) receptor, said method comprising intravascularly administering to said mammal a replication-defective adenoviral vector comprising a nucleic acid molecule that encodes a polypeptide having an amino acid sequence consisting of amino acid residues 1-259 of any one of SEQ ID NOS.: 1-6 with one or more deletions of amino acids 186-259 thereof, wherein said polypeptide, when expressed in said mammal, lowers the total serum cholesterol level without inducing hypertriglyceridemia.

113. (Previously presented) A method of lowering cholesterol in a mammal in need thereof, wherein said mammal expresses a functional low density lipoprotein (LDL) receptor, said method comprising intravascularly administering to said mammal a replication-defective

adenoviral vector comprising a nucleic acid molecule that encodes a secreted polypeptide consisting of amino acid residues 1-185, 1-202, 1-203, 1-229, 1-247 or 1-259 of any one of SEQ ID NOS: 14-19, wherein said polypeptide, when expressed in said mammal, lowers the total serum cholesterol level without inducing hypertriglyceridemia.

114. (Currently amended) A method of lowering cholesterol in a mammal in need thereof, wherein said mammal expresses a functional low density lipoprotein (LDL) receptor, said method comprising intravascularly administering to said mammal a replication-defective adenoviral vector comprising a nucleic acid molecule that encodes a secreted polypeptide comprising amino acid residues 1-185 of ~~SEQ ID NO:2~~ SEQ ID NO:1 or amino acid residues 1-185 of ~~SEQ ID NO:2~~ SEQ ID NO:1 and one or more of amino acids 186-259 of ~~SEQ ID NO:2~~ SEQ ID NO:1, wherein said polypeptide, when expressed in said mammal, lowers the total serum cholesterol level without inducing hypertriglyceridemia.